

Ecomass® 1700ZC89

Ecomass Technologies - Polyamide

General Information

Product Description

Ecomass® Compound 1700ZC89. Nontoxic alternative to Lead (Pb), weighting and balancing applications.

Features: High Specific Gravity, Stainless Steel Powder Filled Polyamide (PA), Rigid.

General

Material Status	• Commercial: Active
Availability	• Europe • North America
Filler / Reinforcement	• Stainless Steel Powder
Features	• Good Rigidity • High Specific Gravity • Non-Toxic
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	4.51		ASTM D792
Molding Shrinkage - Flow	5.0E-3 to 6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.50E+6	psi	ASTM D638
Tensile Strength	7540	psi	ASTM D638
Tensile Elongation (Break)	1.3	%	ASTM D638
Flexural Modulus	1.20E+6	psi	ASTM D790
Flexural Strength	9570	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	1.5	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	318	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	311	°F	ASTM D648
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	0.20	ohms	ASTM D257

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	167	°F
Drying Time	4.0	hr
Processing (Melt) Temp	446 to 491	°F
Mold Temperature	131 to 176	°F

Notes

¹ Typical properties: these are not to be construed as specifications.

